

Maritime Communication Technology Providers Urge Shipowners to Drive Crew Retention and Welfare



The maritime industry has shown real willingness to care for its people, with the latest communication technologies adopted on board, ensuring the welfare of a seafarer who definitely has the right to connect with family and friends back home, and stay updated with everything happening around the world.

Seafarers have won the right to mandatory internet access while at sea, under an update to the Maritime Labour Convention 2006 (MLC) agreed in June 2022. However, how much access they can expect, where and at what cost, remain to be seen. Working for long periods at sea can be isolating, and a lack of contact with the outside world can have profound implications for seafarers' wellbeing, which was obviously seen during the pandemic.

Communication technologies and crew

welfare is Robban Assafina's main story in this issue, with discussions circling the challenges in this part of the industry, and shipowners' sense of duty to try to retain seafarers' attention and interest in this career. To meet the fast-evolving requirements of modern shipping, companies are seeking to provide their seafarers with reliable, high-speed connectivity and the freedom to use their devices on board.

A digital appetite

Jon Harrison, GM EMEA & VP Communication

Systems at Intellian, describes the huge changes which the maritime industry had undergone recently, as the technological revolution is changing traditional working practices.

"It's an exciting time for the satellite market, especially within the maritime application. The last five years have seen a revolution in the maritime industry, leading to advancements in technology such as Low and Medium Earth Orbit mesh networks bringing data closer to vessels and crews. Improvements



Jon Harrison

in connectivity, which have been discussed for many years are finally coming to fruition through huge investment and innovation in the sector."

These changes, according to Harrison, have come alongside the evolution of unprecedented global data demand fueled by e-commerce and the cloud based services. As every individual is now more connected than ever before, Satcoms are responding to this digital appetite in all areas of the maritime sector and beyond, whether for crew entertainment, business operations and fuel management.

With this in sight, Harrison believes that the industry is on the verge of a greater evolution: "New constellations and technologies are bringing more processing power to vessels for a more connected experience - a higher quality of data, ensuring improved crew welfare, mental health and personal resilience as well as other operational factors. We're only at the start of this exciting curve in the evolution of connectivity, and we expect it to continue in an exponential trajectory."

As crew welfare and wellbeing are equally becoming much bigger priorities for shipowners' agendas right now, Harrison says that costs from a bandwidth perspective are generally decreasing, and the pandemic has really highlighted the need for owners to be more understanding and sustaining with their crew's accessibility to worldwide data and the ability to connect to their families.

The wellbeing: A priority

It is true that digital transformation is placing a profound impact across the maritime industry, where technologies are making the



Kurt Harding

sea life easier and safer. According to Kurt Harding, Regional Head of HR & Crewing, Svitzer AMEA, the general wellbeing of seafarers for global operators became a priority, if it was not already, during 2021 and 2022, as the maritime industry was in reactionary mode to a global pandemic with a plethora of humanitarian and employee focused issues raised.

"New people resource concerns such as mental wellness, freedom of movement, the ability to mobilize personnel globally, medical insurance and providing a safe work environment while not operational joined the continued HR marine priorities of employee

relations, compensation and continued employment as areas in which crews now have a voice and see operators as having an obligation to address."

According to Harding, the first step for global companies such as Svitzer is to accept and embrace the new normal of people resources and the modernization of the topics that are important to seafarers. "In Svitzer - as a response to this - we have therefore launched a number of initiatives with the aim of improving crew welfare and well-being - for example a mental health and well-being campaign including access to professional support without stigma, a new medical insurance package that covers crews on shore leave, and paid maternity and paternity leave."

In the same manner, Nabil Ben Soussia, Group CCO and President Asia, Middle East & CIS at IEC Telecom highlights the turbulent events in recent times, which have accentuated the need for always-on connectivity, no matter where operations take place - on land and at sea.

"Such is the demand and new paradigm for on board crew communications that the Maritime Labour Convention has declared connectivity to be a mandatory requirement. In addition to meeting these requirements, the maritime sector is living proof that seafarers' recruitment and retention being closely tied





Tore Morten Olsen

with the facilitation of crew communications.”

These technologies/digitalization shape the way to a green future, optimised operations, enhanced navigation, and improved logistics, says Ben Soussia, and the cumulative effect of these improvements leads to decreased fuel consumption and decarbonisation, ultimately making sea life safe and primed for sustainable growth.

The Best Blend of Solutions

And as things are changing very fast, according to Tore Morten Olsen, President, Maritime, Marlink, these times are very exciting for companies like Marlink and its customers. The change is being driven by the trend towards digitalisation in the shipping industry and the need to work smarter, using new tools and new approaches to solve many challenges, mainly decarbonization.

“Marlink has always approached industry challenges on the basis that shipowners need the best blend of solutions; one network won’t meet the needs of business, crew and compliance. It takes a combination of services properly orchestrated with digital tools that enable owners to create efficiencies now and plan for the future,” says Olsen, as Marlink customers will soon be able to take advantage of the latest Low Earth Orbit (LEO) satellite services which will increase the range of high bandwidth, low latency services available to shipowners.

Connectivity On board

The degree of change onboard following this revolution is almost unquantifiable, according to Harrison, with connectivity on vessels being a 24/7 requirement, due to the immense volumes of data that is being constantly generated onboard as devices



Nabil Ben Soussia

become smarter, bringing new efficiencies to shipboard operations.

“Improved, instant connectivity 24/7 has also had a significantly positive impact on improving crew wellbeing and safety,” says Harrison, as enabling crew to communicate effectively with their families, stay connected to the world - as an example gain access to key services such as medical advice or services - is a significant benefit from digital transformation in the sector. “If a crew member’s well-being is highly regarded and preserved, they will naturally be happier, healthier, perform better and in a safer manner, whilst working away onboard.”

Challenges

Harrison continues to talk about the proliferation of new technologies providing shipowners and operators with more choice, however, deciding which technology to invest into and what equipment to put onboard their vessels can be a new challenge facing seafarers and shipowners.

“Nevertheless, these days GEO, MEO and LEO based networks all have a role to play, and the approach to the provision of hardware requirements to leverage this expanded capability and capacity can be complex,” explains Harrison, “and understanding which network is best for your vessel, based on its requirements will be crucial and investing in a system that was designed and built to be future-proof and capable of connecting on GEO, MEO and LEO networks like our NX Series, is the easiest and logical choice.”

This is what Olsen believes as well, since more data means a clearer understanding of vessel performance and condition, including commercial and compliance data,

management of crew, training and of course crew leisure services, stating that “life at sea will always be a challenge, but by providing the connectivity and solutions that makes it safer, more automated and easier in terms of connections with home then we will have achieved a lot.”

Define the needs

With the new digital technologies on board, Olsen believes that shipowners need to be aware that just buying a ‘big pipe’ of connectivity or an on board email program is not going to solve their problems. Shipowners need seek advice in defining their needs now and in the future, and have an open conversation with service providers such as Marlink about how to achieve that in a way that leaves room for growth.

Olsen explains that ships have been connected on a needs-only basis for too long but that is changing. The availability of flexible, reliable bandwidth has increased rapidly in recent years – and will gain a further boost when new LEO services become available. The availability of more bandwidth gives vessels the opportunity to be truly connected to their managers, using common software, ERP and collaboration tools.

“For seafarers, the challenge is still that delivering connectivity and apps in all areas of the world at the speed we are used to on land can be a challenge. This will improve significantly as LEO capacity comes into play, and combined with Sealink and 4G/5G terrestrial connectivity near land should be the best bet for speed and convenience. Full Global LEO services are still some way from deployment; its right to get excited about it but we need to be realistic too.”

Retention of Seafarers

Despite the challenges, shipowners need to bear in mind the significance of providing the right communication technologies on board for seafarers, as the industry is facing a general shortage of skilled seafarers, and crew welfare is becoming an important headline to attract and retain talent. Here, Harding refers to a serious and very real talent retention and attraction risk across all ranks of seafarers, believing that operators must now do a lot more than compensation to attract skilled seafarers.

“The overall value proposition of employers for crews must now include a clear communication directive to potential employees of what non-monetary terms they offer such as compassionate support when

you need it, formal programs for psychological medical access and organizationally led initiatives to promote physical and mental agendas for employees to take care of themselves.”

That is true, for increased safety, efficiency and on-board health have helped both crew retention and recruitment of talent, says Harrison, referring to the challenge of finding crew who are interested in a long term career in the maritime sector. “However, we’re seeing that the more connected the vessel, the bigger retention for crew there is. According to research from Danica Maritime, 11% of seafarers changed vessels in 2020, in order to gain access to the internet.”

And that is what Ben Soussia explains further. Modern crew connectivity goes far beyond just an email or phone call to home, he states, as digital connectivity now facilitates a range of communications including: onboard training in real time, at the convenience of the seafarer and to suit vessel shift patterns; specialist medical assistance on a face-to-face basis; and better connection between management and employees to improve staff support and benefit career development. “In other words, seafarers expect connectivity – countless crew happiness surveys underscore this assertion – and the younger generation want to connect via their own personal devices.

Recently, the International Chamber of Shipping/BIMCO Seafarer Workforce Report predicted a crew shortage by 2026. In light of what is being referred to as the “great resignation”, many job offers now routinely

emphasise the availability of on board internet access, safety solutions, and individual sensors for better work coordination as well as real-time health information transfers, making a life working at sea seem attractive to new crew members.”

So while shipowners are going through digitalization, adopting new technologies, meeting seafarers needs and providing adequate communication tools, Olsen clarifies that the majority of shipowners served by Marlink provision crew calling and internet access at no cost for their crew. Doing so is a mean to drive retention; attracting and training the right people is a considerable investment for vessel operator.

“It makes perfect sense to give crew reasonable access to the internet as part of their employment package”, he says, “A hybrid network, comprising VSAT, L-band back-up and terrestrial 4G/LTE and soon LEO services can be configured to provide the required level of bandwidth and coverage.” With more traditional communication modes falling away as irrelevant and out of date, many global operators remain behind the communication curve, according to Harding.

“To stay ahead of the curve, operators need to invest more in adequate communication tools that both factor in the special circumstances of seafarers and the need to stay updated on company, operations and industry news, bearing in mind that means to communicate to our crew members have changed significantly over 24 – 36 months mainly through the need to.”



Where does cyber security stand in all of this?

With all the connectivity around, cyber-attacks are becoming an increased risk for seafarers and shipowners, says Harrison, clarifying that “the more online we are, naturally the higher the risk. That’s why it’s critical to ensure the terminals and internet connectivity in place on the vessels has cybersecurity built in. This is a major factor that we consider in all our terminals today.”

As more vessels become connected, there is a greater emphasis on cyber security, according to Ben Soussia. “On the one hand, it’s the systems and access points that create issues. In a corporate environment, most of the cyber threats come from unintended contamination from a personal device. IEC Telecom solves this problem with OneGate network management system. The terminal allows the separation of operational networks. Hence, even if one of those gets infected, the rest remain secure and operational.”

On the other hand, the success of cyber security implementation depends on policies which must be custom-made for each specific case, says Ben Soussia. “Needs for cyber security onboard a bulk carrier will differ from needs of a fishing vessel. As such, the role of satcom service operators has shifted from enablers to consultants, helping customers to leverage digitalisation without exposure to cyber-attacks.”

Naturally, cyber security should be front and centre of a shipping company’s attention – just as it would any company operating with multiple partners and stakeholders, says Olsen. But being the risk that surrounds shipping operations, it shouldn’t be the reason to limit connectivity or the use of applications.

“What shipowners need to understand more than anything is that digitalisation means a vessel is a single ecosystem, encompassing Information Technology and Operational Technology networks and that they need a partner who can help them address both.

It is important that owners understand how sound cyber practices can enable their digital strategy, from crew training and operational practices to cyber systems like Marlink’s CyberGuard Threat Detection tool which offers a proactive layer of defence against unauthorised access to the network, enabling shipping companies to ramp up their analysis and response to cyber threats and ensures compliance with latest regulations and quality systems.”